DEVOTED TO AGRICULTURE AND ALL ITS VARIOUS KINDRED ARTS AND SCIENCES.

Honor waits, o'er all the earth, The art that calls her harvests forth.—BRYANT.

VOL. I. SATURDAY, APRIL 14, 1849. NO. 9.

S. W. COLE, EDITOR. QUINCY HALL, BOSTON. J. NOURSE, PROPRIETOR.

FRUITS AND FRUIT TREES.

[Concluded from p. 120.]

At the agricultural meeting, March 27, Hon. M. P. Wilder in the chair, the discussion on the above subject was continued.

Mr. Wilder observed, that farmers generally know how to preserve winter apples, but the keeping of pears is not so well understood. This is important, owing to the high price of winter pears. Mr. Paquett, of France, succeeds remarkably well, by having a room within a room, and placing his fruit in the inner room, packed in oaken boxes, with dry sawdust and charcoal dust two thirds up the fruit, which is placed stem upward. In this way pears are kept perfectly sound till July. Apples may be kept in a temperature nearly down to freezing, without injury; but pears should be kept at a temperature of about forty-five degrees, till sufficiently advanced for ripening, which should be effected in a warm room. If they are kept in a colder state, they become injured, and cannot be recovered.

Hon. Mr. Brooks, of Princeton, said, that farmers should raise their own fruit trees, rather than buy those that were forced to a rapid growth, by high culture in the nursery, as such trees would not do well on poor lands. Fruit from land in moderate condition is better than that produced by high culture. It requires about twenty years from the seed to get apple-trees into a productive state.

Mr. Dexter, of Plymouth, inquired for a remedy for lice under the leaf that destroy the foliage and fruit. Some of these, kept under glass, changed to house flies.

Mr. M. S. Rice, Esq., of Newton, recommended soap-suds or whale-oil soap, as a remedy for insects. He was reaping fruit from trees set twenty years ago. He considered the birds our best friends; even the crow is a useful bird. He once had a tame one that followed him in the field, and picked up insects.

Colonel Wilder said, that men had set trees at a late period in life, and yet they lived to enjoy the fruits of their labor.

Mr. William Parker said, that he packed his apples in barrels, with oat chaff, and they kept remarkably well. He let them remain out door in the fall, till there was danger of freezing.

Mr. Jones, of Wayland, said, that he had grafted old apple-trees with excellent success and profit. For a few years past, he had picked from ten to twelve barrels a year, from an old tree that his neighbors said was not worth grafting. He thinks that sweet apples are better for grafting on the stocks of sweetings. He perceived a difference in the color and flavor of Porter apples when grafted on stocks of the Siberian crab.

Colonel Hubbell, of Berkshire county, said, that he had preserved apples, in excellent condition, in oat chaff and air-slaked lime. In this way he kept fall apples in good condition till March, and winter apples to a late period, preserving their freshness and flavor better than in any other way.

Mr. H. C. Merriam, of Tewksbury, said, that he soon got fruit by grafting old trees. He took off the whole top at once. He would buy trees in the nursery rather than wait for them to grow from seed.

Mr. A. G. Sheldon, of Wilmington, said, that young farmers want encouragement in this business. Trees well set will cost about one dollar each, and for nine years they will gain in value one dollar a year. Old men should set trees for posterity, as they share in the fruits of the labor of those who have preceded them.

Mr. Cole, of the New England Farmer, said, that in raising trees we should select seed from healthy and vigorous trees. Seeds from natural fruit are better than those from grafted fruit. He would set trees from the latter part of September to the last of May. He preferred the last of September and first of October, as trees set at that season would throw out small fibrous roots in the fall, and attain a good growth the next season. When set in the fall, a mound of earth should be formed around the trees to protect the roots. He did not think that the extreme cold injured the peach buds so much as the sudden changes in the weather. Sometimes the buds are killed early in winter when the cold has not been severe.

CULTIVATION OF FOREST TREES.

On Tuesday evening, at the agricultural meeting, Mr. William Parker in the chair, this subject was discussed.

Mr. Buckminster, of the Ploughman, recommended raising forest trees by the road side, affording a grateful shade, a growth of timber, and shelter from winds. By the use of evergreens, the drifting of snows would be prevented. He recommended white pine for this purpose. The rock maple is excellent to set on the south side of roads. In transplanting pine trees, it is not important to take up long roots, but a sod of earth with the roots insures success.

Mr. Sheldon, of Wilmington, said, he thought that the white pine perfected its seed only once in three years; and all in the country, as far as his observations had extended, ripened their seed at the same time. He found that in Massachusetts, New Hampshire, and Vermont, all the cones were small the next year after the seed had come to perfection. Some lands that sold thirty-five years ago, three years after the wood was cut off, at four dollars per acre, are now worth one hundred and ten dollars per acre. Forest trees will grow on poor land. In saving pines for seed, it is best to leave them in clumps, as single ones may blow over.

Dr. Bardwell, of Whately, said, that there were extensive tracts of land in some parts of the state that produced only about six bushels of rye to the acre, which would hardly pay for cultivating. On these lands good crops of pines might be raised, and with profit. He thought that pitch pines were the most profitable, as they would grow on poorer lands than white pine.

Mr. Cole, of the New England Farmer, said, that the seeds of forest and fruit trees, generally, would not vegetate if sown dry in the spring. They should be sown in the fall, or put into moist earth, and buried in the ground, or placed in the cellar. In the latter case, it was necessary to keep up a moderate degree of moisture only, as wet or dryness would be injurious. It is the least trouble to keep them buried in the earth, if the land is not prepared for sowing in the fall, as they are liable to dry in the cellar; but this may be prevented, in a great measure, by putting them into tight vessels. Stone, earthen, or iron vessels are good, as they do not absorb the moisture from the earth. Some writers speak of certain kinds of seeds that will not vegetate till the next season: this opinion is probably the result of sowing dry seed in spring.

Mr. Jones, of Wayland, thought that raising forest trees was the most profitable part of farming. He purchased a wood lot, and paid ten dollars an acre for it and interest on that sum during the time the wood had been growing on it. He thought it was best for a farmer to cultivate a little land well, and raise forest trees on the rest.

Mr. Sheldon said, that he had transplanted pines in the middle of summer with excellent success.

Prosperity is no just scale; adversity is the only true balance to weigh friends.

NOTICES OF PUBLICATIONS.

Manual of Morals, for Common Schools, adapted also to the Use of Families. 212 pages, 18 mo. Published by John P. Jewett, Boston; William E. Wardwell, Andover.

This is a work of sterling merit, on a subject too much neglected in the education of youth. Great pains are taken to give the child instruction in science and literature, but little is done to give him systematic instruction in morals, and show him how to make his acquisitions in knowledge available in discharging his duty to his God, his fellow-beings, and to himself. These important duties are taught in this neat little work, in a clear and pleasing manner, particularly from the numerous historical and anecdotal illustrations. No person, young or old, can read this manual without improvement, unless he is so far advanced as to need no amendment.

The Wisconsin Farmer, is a new paper, which we neglected to notice in our list of agricultural journals in our last number. It is a neat octavo, and ably conducted; published monthly, by Mark Miller, Racine, Wisconsin, at 50 cents a year.

ACKNOWLEDGMENTS.

Of Messrs. S. and G. Hyde, nursery-men, Newton, the fruit and scions of the Philadelphia Pippin apple. This fruit is small, very fair and handsome, and remarkable for its freshness and fine flavor after late keeping. Whether this is the true name or not, we do not know. Among numerous collections of scions from some friends, and distributions to others, were some under this name, which we furnished to these gentlemen. This is the first fruit which we have seen of it, and we are pleased to find it so promising.

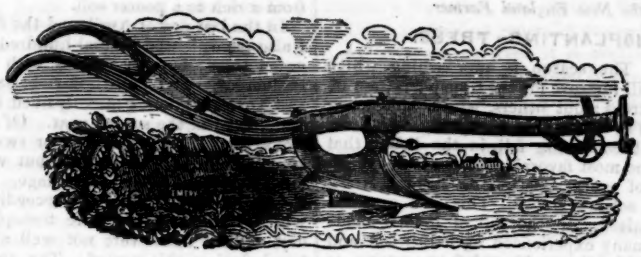
Messrs. Hyde go mostly for the well known and excellent varieties of fruit, cautiously introducing and giving a fair test to new kinds. They have in their nursery a large assortment of fruit-trees of standard kinds, well adapted to the climate.

Of Samuel Walker, Esq., Chelsea, some noble specimens of the pound pear, as fresh as when they were gathered. This variety is a great grower and bearer, the fruit very fine for cooking, and it is in use from November till May.

Of Mr. Jacob Noyes, Abington Centre, specimens of several kinds of seedling potatoes, which he recommends as excellent. We shall try them, not by eating, but by planting them, for experiment in comparison with other kinds. The samples are fine, and we are much obliged to Mr. N.

We are indebted to Samuel P. Fowler, Esq., Danvers, for plants of Houghton's Seedling Gooseberry.

Dr. J. W. Francis, who commenced life as a printer, in some remarks at the Franklin festival in New York, alluded to the singular fact that, when he afterwards became a lecturer in the medical college of that metropolis, one of the text-books which he employed was a copy of the proof sheets of a work every type of which had been set by his own hand, when a printer.



SUBSOIL PLOUGH.

It is only a few years since the first subsoil plough was introduced into this country; and we had the pleasure to assist at the first trial, on the farm of John Fenno, Esq., in Chelsea. This plough was purchased by Mr. Charles P. Bosson, in England, for Messrs. Ruggles, Nourse, & Mason: it cost forty dollars in that country.

Now, superior subsoil ploughs, may be had in this country, for one fourth of the cost of that in England; and they are of greater strength, for we used that plough only a short time before it was twisted so that a common observer could hardly tell for what purpose it was intended.

The subsoil plough is a valuable implement on many soils, by deepening the tillage and giving sufficient room for the descent of the roots of plants, and to promote the ascent of moisture, in dry weather.

By the use of this plough, the subsoil is loosened deeply, and gradually mixed with the active soil, and brought to the surface, where, by changes from the air, rains, snows, and frost, it becomes improved, and restores, in some measure, many ingredients that have been lost from old lands.

Numerous examples have been given to the public, showing the great utility of this implement. Yet, in some cases, it has been reported that there was no perceptible advantage from its use, while in other cases, the crops have been increased fifty per cent. See the remarks of Professor Mapes on this subject, p. 138.

DITCHING AND DRAINING.

At the agricultural meeting, on Tesday evening, this subject was discussed.

Mr. Buckminster said, that he hired ditching done by the job. He gave twenty-five cents a rod for ditching three feet deep and three feet wide. A man would make six rods of ditch in a day. He usually makes ditches four rods apart, and parallel, for the convenience of ploughing.

Mr. Merriam said, that he found it necessary to make ditches around the meadow, to cut off the water from the high land. He preferred open to blind ditches.

Mr. A. G. Sheldon remarked, that by ditching a maple swamp, the growth of trees was greatly improved; they declined on the ditch getting filled up, and revived on its being opened. In thirty years, the growth amounted to forty cords to the acre.

THE PEACH BUDS.

There has been some unnecessary alarm as to the peach buds, as it was stated by several speakers at the agricultural meeting, that they were generally killed, so far as their observations had extended; but on examination, and by inquiry from cultivators in different sections, we think that more than half of the peach buds are sound, and that there is a fair promise of fruit. Friend Earle, of the Worcester Spy, says, that from examination he thinks that two thirds of the peach flowering buds are in a healthy condition.

As the past winter has been colder than the winter of 1847-8, and the peach buds are killed less, the argument, drawn from a partial and hasty view of the subject, that it is the severe cold, and not the changeable weather, that kills, falls to the ground, so far as relates to the last two winters. The last winter was noted for severe and steady cold, and its predecessor for mildness and variableness, during which the fruit buds of the peach were nearly all killed. So every season affords additional evidence in support of the proposition which we have frequently offered on this subject.

GUTTA PERCHA FOR GRAFTING.

At the agricultural meeting, on Tuesday evening, Dr. Sanborn exhibited a preparation which he had made for grafting. It was composed of gutta percha, dissolved in chloroform, having the consistency of thick molasses. He had used it with excellent success. It is applied, in a very thin coat, with a brush. As this is a new article for this purpose, and some who try it may not get it of the right consistence, we advise its trial at first in a small way. Dr. S. remarked, that it was valuable for wounds, burns, and sores, such as the salt rheum, &c., as a thin coat protected the raw flesh from exposure, and thus promoted healing. Gutta percha will prove to be a valuable acquisition, both in the arts, and in medical appliances. It is a new article, and numerous, and varied experiments are necessary to test it fairly; and this will soon be done among the enterprising and ingenious.

For the New England Farmer.

TRANSPLANTING TREES.

Mr. Editor: The season is approaching which many persons will improve for the transplantation of fruit and forest trees; but others, whose lands may be well prepared by the spring ploughing, will defer this work until the ensuing fall, in the belief, that the autumn is the most favorable season for the removal of trees of every description. Which is the best season for setting trees? This is a question which is often raised. In the fall of 1846, I made this inquiry of many experienced agriculturists, and their opinions upon this subject left me quite as undecided as I was before I put the interrogatory. Their recommendations, alternately of spring and fall, nearly balanced each other, and produced in me a state of indecision, which I, at last, removed by consulting my own convenience. I deferred the work until the spring of 1847. I then transplanted five or six hundred fruit and forest trees; and the success which resulted from this labor I will proceed to communicate.

One piece of land, on which I set between one and two hundred apple-trees, had not, for many years, been improved. It was an exhausted soil, and considered as of little value. The field has a southern inclination, the upper part dry and loamy, while the lower portion is wet, and, in some places, even boggy. The land was ploughed in the fall of 1846. In the following spring, thirty loads of stable manure, and twenty-five of meadow mud, which the frost of the preceding winter had rendered friable, were spread upon it and ploughed in; the trees were then set at a distance of two rods. These trees all lived, and grew vigorously, even the first season. They all put forth the second spring, and grew very thriftily through the season, with the exception of a single tree, which was injured by the tillage. Many of these trees, at the close of the second season, had attained to the height of eight feet, and their stalks, at the surface of the ground, were six inches in circumference. These trees have, at least, quintupled their size by two years' growth.

On another piece of ground I set three to four hundred fruit and forest trees, and shrubs. This land had been improved as a field for several years, and was in a much better condition than the former lot; yet, as this was designed for a house site, and as it was desirable to produce from it a variety of fruit at the earliest possible day, a much larger quantity of manure was bestowed upon it; and upwards of one hundred apple, pear, peach, cherry-trees, &c., were transplanted into it, with great care, in the spring aforesaid. These trees, with the exception of two cherry and one pear-tree, put forth leaves the second season. They *lived*, but they do not grow. Many of these, the pears especially, produced but a few small leaves; the bark looks sickly, and spots of moss appear on the trunks. I indulge the hope that by still more liberal manuring, and by washing the bark with potash water, they may yet be reclaimed, and become thrifty. The difference in the appearance of the trees, on the two lots before named, has developed to me a rule which, if it had been suggested to me at an earlier period, would have been of great service, and which I will now lay down, in the hope that it may still prove beneficial to others. The apple-trees in the ground first named were from Rhode Island, from a light soil, commingled with sand; and they were set in land which, although not very well prepared, was still better than that from which they were taken. The trees upon the other lot, which was made much richer, were taken from nurseries in the vicinity of Boston, from a soil much stronger than that to which they were transferred. In view of these facts, then, I will venture to say, let fruit trees never be removed from a rich to a poorer soil.

In the last day of April, and the first of May, 1847, I also transplanted several hundred shade and evergreen trees; but my success with these was rather indifferent. The pine, cedar, balsam fir, *arbor vitæ*, and Norway spruce, generally lived, but grew but very little, even in the second year. Of about forty hemlocks, I saved only some ten or twelve; and I have several hollies which survive, but which, as yet, put forth but a thin and sickly foliage. Perhaps I ought to say here, that the July succeeding the season in which the evergreens were transplanted, was very dry, and the trees were not well attended and watered during this period. The shade trees, set in April, 1847, succeeded rather better. The elm, ash, and maple, all leaved out the first year, and grew well the second season. Of my sassafras I lost one half; of my oaks, about two thirds. I have succeeded, but at the expense of great care, in preserving two fine shagbarks, or hickory trees. These were removed from their natural position, and reset by an experienced hand, and watered, almost daily, for the first summer. About one third of my beech-trees were saved. And here I beg to say a word in praise of the beech, a tree not generally esteemed, in this part of the country, for shade or ornament. It is a shapely, cleanly tree, yielding a delicious nut, which becomes larger, and even sweeter, by cultivation; and it retains its leaves to a later period in the fall than almost any other tree of the deciduous class. Homer and Virgil have noticed this tree. It was a beech which stood at the Scean gate of ill-fated Troy; and it was under a wide-spreading beech that Tityrus breathed forth his amorous strains on his slender pipe; and the first parks of Europe, relying on reports which have been often made, are stocked with this tree, and esteemed as highly as any of the shades in the country, not excepting either the oak or the elm.

All the lesser trees, and flowering shrubs, which were set in the season aforesaid, have done well, with the exception of the purple beech. These put forth a few scattering leaves in June, but they soon fell, and the shrubs were dry and dead before the close of summer.

My experience, in regard to fruit trees, induces me to recommend the spring season for their transplantation; but I am not fully satisfied with the result of my labors in relation to shade trees and evergreens. Perhaps the last would have done better if their removal had been deferred until the last of May or first of June; and it may be that both are more likely to succeed when transplanted in the fall. I hope, Mr. Editor, some of your correspondents, who have tried different seasons of the year for transplanting shades and evergreens will communicate the results of their trials through the medium of your paper. Let the experiments of the past, in matters of agriculture, be collected into a common fund, for the benefit of the farmer in his future operations.

ABRAHAM T. LOWE.

Bridgewater, *March* 20, 1849.

For the New England Farmer.

TALMAN SWEETING—SOUTHERN TREES.

Mr. Editor: I see by the newspapers that the subject under consideration, at the last agricultural meeting, was fruit trees, transplanting, &c. A subject of more importance could not be brought before you. I read the remarks of one of your speakers, recommending a number of kinds of apples that should be cultivated, and among them the Talman Sweeting. My experience in the cultivation of

fruits, leads me to doubt very much recommending the cultivation of fruits, brought from one section of the country to another, without first ascertaining whether the fruit will do well.

Permit me to give you my own experience, in the cultivation of the Talman Sweeting. In the fall of 1834, we had but little fruit in any part of the country, excepting in Maine. There was a frost, on the 15th of May, that cut off all the more tender fruits at the south and west, and nearly all the apples in all the states except in Maine. Seeing there was a scarcity of fruit in this region, I went to Augusta, Me. in October, and there, for the first time, I saw the Talman Sweeting, and it grew in perfection. I thought much of it, and in the spring of 1835, I sent down, and obtained one hundred scions, for which I paid one dollar and fifty cents. I gave some of them to my neighbors, and set some of them myself. We put them on three farms, in different parts of the town, and have given them a fair trial, and they will do nothing; they will not pay the cultivation. One of my neighbors grafted a fine row of trees just in bearing state, and he is now grafting over again. The apples are knurly, and not fit to eat.

It is of the utmost importance, for any one commencing an orchard, to select those fruits which are known to grow well, that he may not be disappointed. It is now a well ascertained fact, that fruits will not flourish in every part of the country equally well. I noticed one circumstance, last fall, which I have never observed before. In the spring of 1844, I went to Keyport, New Jersey, and bought some peach and apple-trees. In 1845, I ordered more peach-trees: some of the trees I set out myself, and sold to others. In 1847, they bore some fruit. Last year, there was not one peach to be seen on the southern trees, while there was some fruit on all, or nearly all, of the trees raised here. I should hardly have been willing to believe it, had I not seen and examined myself.

This is an important fact, worth remembering. The trees that came from New Jersey appeared to stand the winter; that is, the branches were not killed by the winter; but how it was that the fruit was all killed on the southern trees, and on the others it was not, is more than I can account for.

I took some scions from New Jersey, of the Jersey Pie Apple, and set them; and last fall the tree, although a small one, bore some very fair, and handsome apples. From what I have observed within the last year, I very much doubt the utility of buying trees from the south; although, previous to this time, I thought the trees that came from New Jersey did quite as well as trees raised with us.

Respectfully yours,

DANIEL LELAND.

Sherburne, *March* 26, 1849.

Editorial Remarks.

From the foregoing communication, it appears that the Talman Sweeting does not sustain its usual character with Dea. Leland; and there is hardly any fruit that does well every where. Some kinds seem limited to a few sections, while others are adapted to various soils and climates. The Talman Sweeting is popular in most parts of the country, from Maine to the West. It is a native of Rhode Island, where it is extensively cultivated. It succeeds well in this vicinity, in strong soils. More apples of this variety are sold in this market, than of all other winter sweet apples. We have no winter sweet apple that is a universal favorite, like the Baldwin, Greening, Sweet Bough, &c. The Danvers Winter Sweet, Talman's Sweeting, and Seaver Sweet, (Can apple of Coxe, probably,) generally succeed well.

As to southern trees, it is evident that they are more tender than those raised in the north. No one would suppose that an African could endure the cold of Greenland like a native of that frigid region. Peach buds are often killed, while the trees are uninjured.

For the New England Farmer.

FOR BLEEDING IN GRAPE VINES.

Mr. Cole: I will mention a remedy for the bleeding of the vine. Some four or five years since, in the spring, I removed from an Isabella a stalk of about three fourths inches diameter. It began to bleed at once, and profusely. My purpose was to endeavor to sear the wound by burning on it common sulphur. Accordingly I made the cut *horizontal* and *smooth*. Wiping it dry, I placed the sulphur upon it; but before I could ignite that, the sap had completely saturated it. I then concluded to press the powder into the pores of the wood. With my thumb I did so, pressing hard and using a somewhat grinding motion. The operation was repeated two or three times, and in about five minutes there was no discharge of sap. I have tried this remedy several times, and with equal success. Probably any fine powder, as pulverized plaster, and perhaps wood ashes, will answer. But I have always used sulphur. As the extremely hard pressure and friction produce soreness, I now wind a narrow strip of firm leather around the thumb.

Yours, &c.

J. HUBBARD WELLS.

East Hartford, Ct., *March* 26, 1849.

For the New England Farmer.

DO YOUR OWN GRAFTING.

Mr. Editor: Of the multitude of different pursuits in the art of agriculture, grafting now claims particular attention. It is for the interest of every farmer to become versed in this easy, simple, and important science. Boys, in this vicinity, have, for a number of years past, performed this work with pleasure and unrivalled success. True, they may not set so many scions in a day as those who are older and more experienced; but we guaranty to say, that they will be more successful. Not only this, but we know from experience that the latter often kill the tree itself, thus, perhaps, destroying a very promising and valuable production.

The reason for this is evident among the inhabitants in this, the chief farming section of this town, who pay considerable attention to the raising of fruit; having raised, in one year, from six farms, — all bordering upon one another — upwards of three thousand barrels. We discard the use of composition in grafting; believing that it contains substances that are poisonous to the tree: hence it is that those who use it have so little success. We believe it would be equally wise and judicious for the human family to make a common use of prussic acid, as it is to use this composition as a substitute for clay in grafting. It not only checks the growth of the scions and tree, but the stocks will not heal over for a number of years; but if clay had been rightly prepared and used, they would have healed in half the time.

Clay, in its raw state, is generally too strong; therefore it is best to reduce it by mixing dry horse manure or loam, which makes it more flexible. Sci-

ons do the best when set in clay. As an example, our neighbor employed a man last spring to graft a young orchard, which he set out two years before; and the result was, some lived and some did not. We set out a young orchard at the same time, trees of the same age, and grafted them the same spring, and there is not a single stock but what lived; and I might add, there is not a single scion that did not grow nearly three feet the last year, and some grew four feet. We used clay, and our neighbor used *wax*.

D. W. JOHNSON.

WOBURN, *March*, 1849.

EDITORIAL REMARKS.

We present the views of our correspondent, but we cannot endorse them all. We highly approve of teaching boys to graft, and those who are tractable will soon learn to perform this operation well. Yet there should be no objection to men practising this art; and frequently great experience and mature judgment are necessary in this business. There are some, who profess to be adepts in this art, that manage to make a good job, disregarding the interest of those who employ them. But this is no objection against worthy and skilful men who attend to this branch.

As to the use of clay or composition in grafting, there is far less trouble in the use of composition, and we believe that it is as sure as clay. If the stock is thrifty, and none other is fit for grafting, it will heal over in a short time, and the composition will do but little injury to stock or graft. Composition is now almost universally used, and the change from clay to composition has been the result of long experience and observation by intelligent men, who have in this thing studied their interest, and made very accurate experiments.

For the New England Farmer.

THE PEACH.

MR. EDITOR: At a meeting of the Legislative Agricultural Society, held on the 20th of March, a gentleman from Framingham alluded to the generally conceded fact, that peach-trees did best on elevated lands. He had formerly believed, with others, that it was owing to the absence of frosts in these positions, and their great prevalence and injurious effects on the buds in the low lands. But this opinion he had abandoned, as he lately had a fine crop of peaches after an early spring and late severe frosts. He now thought the high land culture the more successful, from the circumstance, as he believed, that in these positions the average cold of the winter was not so great as in valleys or on plains.

But is this a fact? Is not the relative cold on high lands greater than in low? I grant that, in the spring, when the land is naked, low and generally damper soils throw off more moisture to the atmosphere than the high, and consequently at night there is more moisture on the trees to be acted upon by the frost; or that they are less exposed to the drying influence of the wind than those on hills; but during the greater part of the winter, when the earth is frozen or covered with snow, these exhalations not taking place in valleys more than in other positions, we cannot perceive that the coldness of the winter would have different effects, unless it is in fact greater in valleys than in higher and exposed positions, which is what I wish to ascertain.

L.

EDITORIAL REMARKS.

Our correspondent must have misunderstood the speaker, or consulted some report that was not correct. Major Wheeler thought it was the extremely cold weather that killed the peach buds, and not the sudden alternations from heat to cold; and he remarked that high lands were the most favorable to raising peaches, as on such situations the extreme cold is less than in valleys, and of course less liable to kill the buds. He did not say that the average temperature was less on high lands.

We have often given our opinion on this subject, and we could bring thousands of evidences to support it, by estimating in the manner of the good lady who had six objections to marrying a gentleman, which were, her husband and five children; for each tree would be a witness. We have often urged the importance of setting peach-trees on elevated lands, not merely because the extreme cold is less there, but because the extreme heat in the cool season is less in proportion than the extreme cold. For the warm sun, and mild, wet weather start the sap and the buds, and predispose them to injury by sudden cold; and this is not all; the hot sun on the frozen buds is doubtless still more injurious than the warm weather that precedes freezing, or the severity of the frost. For we found, on examination, that the buds had been killed in December from sudden changes in the weather, when the thermometer had not, for the season, been lower than fourteen degrees above zero.

For the New England Farmer.

EFFECT OF THE STOCK ON THE SCION.

MR. EDITOR: A correspondent in the third number of the New England Farmer has put the query — "Has the stock any influence on the quality of the fruit of the graft?" Not having sufficient experience myself to answer this question, and as he thinks it has no such influence, I would suggest the propriety of publishing the following from Fessenden's American Gardener.

"The nature of the fruit is, to a certain extent, affected by the nature of the stock. Miller says decidedly, that crab-stocks cause apples to be firmer, to keep longer, and to have a sharper flavor; and he is equally confident that if the breaking pears be grafted on quince stocks, the fruit is rendered gritty or stony, while the melting pears are much improved by rich stocks. This, according to Neill, is scarcely to be considered as inconsistent with Lord Bacon's doctrine, that the scion overruleth the graft (stock?) quite, the stock being passive only; which as a general proposition, remains true; it being evident that the scion, bud, or inarched shoot, is endowed with the power of drawing or forming from the stock that peculiar kind of nourishment which is adapted to its nature, and that the specific characters of the engrafted plant remain unchanged, although its qualities may be partially affected." — *Ed. Ency. art. Horticulture.*

REMARKS BY THE EDITOR NEW ENGLAND FARMER.

This is a subject on which much may be said on both sides; but at present we will attend to one point, and that is, the referring to Lord Bacon as authority on a subject on which he probably had no

practical knowledge. Some would say that he was a man of science, and he was doubtless well acquainted with many sciences; but had he been well skilled in vegetable physiology and practical horticulture, he would never have made that noted remark which has long been a stumbling-block in the road of improvement.

We will notice one more erroneous view, which many take of this subject; and that is, that science favors the opinion that the stock has no effect on the fruit of the scion. Now, as science is a system of facts, we ask how science can be in opposition to facts. How can one truth be in opposition to another? There is many an error passing under the plausible name of science.

For the New England Farmer.

DIARRHOEA IN CATTLE.

Mr. Cole: On Tuesday, February 6, 1849, while sledding wood with my team, I observed that one of my oxen was affected with "diarrhœa or looseness," (as you call it in the "Veterinarian,") fully equal, or worse, than cattle have, when changed from hay to grass in the spring, when the grass is flush. The next day and the day after, the rest of my oxen (four in all) and two cows in milk, kept at the same barn with the oxen, were badly affected with it; and about the same time four last spring calves, kept at another barn one hundred rods distant from the oxen, were taken; also ten cows, and four steers kept in a field fifty rods from either the oxen or calves, were in a similar case, all within a week from the first ox. My horse and sheep (over one hundred) have not been affected by it, although they ate with all the cattle of the same kinds of hay, and drank with them from the same streams. No other cattle in the vicinity, that I can hear of, have been affected in a similar way.

They were taken very violently, and the dung ran from them in a full stream; they ate but little, for one or two days, but got better of the diarrhœa after about four days: they lost much of their flesh at the time; but have now regained it, and are well and hearty to appearance. We "doctored" but little, indeed none except two or three animals. The weather was exceeding cold at the time, the thermometer being below zero frequently in the morning.

As to the condition and keep of the cattle, I would say, the oxen, two cows in milk, and the last spring calves were in good flesh, and had been regularly stabled or had lain in comfortable sheds, and fed on good hay, mostly from the barns. Some of the hay was cut the past season, some the year before. The other cattle were kept on poorer hay, and lay on the ground: they were in ordinary flesh: all were attacked alike, whether kept on good or bad fodder, or stabled or not. These cases, considering the time of the year, &c., &c., are new to us, no such thing ever happening in this region before, so far as I can learn.

CHARLES B. AYER.

Preston, Ct., *March*, 1849.

Editorial Remarks.

We can assign no cause for the disease named by Mr. Ayer. Its occurrence in cold weather is very unusual. Yet there must have been a general cause, and a local one too, though it may be beyond the power of investigation. Analogous cases are not unfrequent. Sometimes a disease, affecting bipeds or quadrupeds, prevails in some sections, while it is a time of general health in other regions of the same country. Again, a disease is confined to a single district, neighborhood, family, or to an individual. We have known a large family to be all afflicted with a severe, and in several cases a fatal disorder, while all the neighbors escaped, though often attending upon the sick and the dying.

THE CULTIVATION OF THE POTATO.

Editors Cultivator: My own experiments of eight years with the potato have very much encouraged me to continue the alternate culture of seed and its seedlings, with careful selections.

The process does materially improve the potato in *new* and *excellent varieties* — in health and productiveness. At the same time, much depends for success upon a proper situation and preparation of soil, manner of cultivation, time of planting, lifting, and good storage.

Good upland soil, deep thorough ploughing, early planting, with well cultivated approved seedling varieties, in shallow drills, early weeding, light hilling, early lifting, and dry airy storage, do more for the redemption of the potato from disease, than all the nostrums the world can devise.

Potato seed, though it produces generally several different varieties in its seedlings, will not be likely to produce varieties or qualities with which it has no connection. If new and choice varieties be expected from sowing the seed, care should be taken to obtain seed from good varieties, or in the immediate neighborhood of the same.

Seed from the balls will transmit from a diseased stock, in some degree, that disease to its seedlings — to some varieties more than others.

Some have gathered balls from any where, without regard to the character of the stock, planted the seed, and finding in the seedlings disease and inferior specimens, abandoned at once the experiment; and in their judgment, seedling potatoes are no better than old ones.

The same laws that govern the apple, peach, and strawberry, in their culture for new and choice varieties, govern also the potato. If a new choice seedling apple, pear, or strawberry be desirable, why not a new and excellent potato? But neither is to be obtained without the use of their seed, and may be not without a series of experiments, with careful selections.

Potato seed, from properly selected, well cultivated seedlings, combining through the seed the best varieties at home and from abroad, is among the most valuable seeds to be found in market.

Potato seed may be sown, like the tomato, early in hotbed for an early crop; or, like cabbage, in a rich bed in a warm place, and transplanted; or with a seed planter in the fields, with great profit; or broadcast, on rich, fine soil, and lightly harrowed in, with no other cultivation, and the crop of young seedlings, the very best, for planting the next season.

Early sowing the seed and early lifting give the potato a tendency to early ripening. Lifting the potato before it has perfected its growth, it is found dryer in cooking, will keep better through the winter, vegetate earlier in the spring, and become more hardy in its constitution.

Medium sized potatoes cook better, of finer quality and flavor, will plant more ground by the bushel, and are more exempt from disease.

Nipping off the weeds, just below their roots, soon as their appearance, is a better remedy for the potato disease than *nipping the vines.*

My crop of the last season, combining all my best varieties through the seed from home and

abroad, is good; exempt from the prevalent disease, productive, and developing, from the seeds obtained not long since from different parts of the world, viz., Prussia, England, South America, Mackinaw, and other places, varieties promising a valuable acquisition to the potato market. The crop, of about one thousand four hundred bushels, shows distinctly, in its healthy and strong foliage, loaded with balls, its strongly marked and distinct varieties, and the increase of new varieties of fine appearance, the benefits of the progressive alternate culture.

N. S. SMITH.

BUFFALO, *January* 4, 1849.
— *Albany Cultivator.*

REMARKS BY EDITOR NEW ENGLAND FARMER.

We are much pleased with the course taken by the Rev. Mr. Smith, in regard to the potato. He not only gives judicious advice as to management, but, by collecting various kinds from different sections of this, and from foreign countries, and raising new varieties from seed, and disseminating seeds and superior kinds, he is rendering essential service to the cause of agriculture, and doing much to improve the most valuable of all roots. From some seeds which we obtained of Mr. Smith, we raised last season, in several cases, a quart of potatoes from a single seed, and some of them nearly the common size of potatoes.

DEEP TILLAGE—SUBSOIL PLOUGHS.

The advantages of deep culture have been so often written upon, and such uncontrovertible facts in relation thereto have been published, that it would seem almost useless to issue another word upon the subject.

There is not a farmer to be found, I think, in Ohio, who has not noticed the superior size of his grain or grass crop where grown along the bank of a ditch that has been cut within a year or two; and yet with such evidence before him of the practical truth of the benefit of deep culture, too many pass on, overlooking the evidence before them, and too often treating the statements made by others of the actual profit derived from deep tillage as "book learning."

Some remedy for improvement of some farms in Ohio, it is certain, must soon be made, or the farmer who intends to reap when he sows must move farther west. Farms are now to be found that have been skimmed about four inches deep with the plough, year after year, and changing from lot to lot, until the occupant has become impressed with the idea that he must "move off," as lands are "worn out in Ohio." That this is a dark statement, or one of a very general application, I would not have the reader believe; but that it is applicable in many instances I can prove.

Now, as some remedy for these apparent worn-out lands must be had, or the occupant "move to a better," let me call attention to the subject; and if a man is not disposed to believe, that by ploughing the land eight or twelve inches, or even eighteen inches deep, where before he only ploughed it four inches, that he will again reap large crops, and increase more than double the expense of extra labor, let him but make the experiment, and he will be satisfied the statement is correct.

In Thaer's Principles of Agriculture, (a work, by the way, that every farmer should read,) there is abundant proof of the value of deepening soils; and it is there stated that a soil four inches thick, and which may be estimated as worth forty-two; one six inches thick or deep, worth fifty; one eight inches deep, worth fifty-eight; one ten inches deep, worth sixty-six, and one twelve inches deep would be worth seventy-four; and that every additional inch of depth beyond twelve adds five per cent. to the value of the soil.

The Transactions of the New York State Agricultural Society abound in statements, from practical men, of the benefit derived from an extra depth of ploughing over the common practice.

Subsoil ploughs have been described and illustrated in this journal, that it may be presumed every reader knows of them and the mode of using them. I will only add, therefore, for the benefit of farmers residing in Waye county, or who make Wooster their market place, that they can obtain subsoil ploughs, made after the eastern pattern, of Mr. James Johnson, at his agricultural warehouse in Wooster.

Very respectfully,
— *Ohio Cultivator.* F. R. ELLIOTT.

EXPERIMENTS WITH GUANO.

I am one of the pioneers in the use of guano in this section of the country, having used it for about five years. My first experiment was on an old, worn-out sedge lot, on which I applied at the rate of three hundred pounds of Peruvian guano to the acre. The product was a fraction over twenty bushels of clean wheat per acre.

My second experiment was upon the same lot, with the addition of three acres adjoining. The quantity of guano applied was about four hundred pounds per acre, part Peruvian and the balance Patagonian. The product was twenty-five bushels of clean wheat per acre, exclusive of scrapings. In each of the above experiments, previous to sowing the wheat, I mixed about a peck of gypsum to every hundred pounds of guano.

My third experiment was also made with wheat, on six acres of the same kind of land as the other two, which were ploughed up directly after harvest, and manured with four hundred pounds of Patagonian guano, mixed with two bushels of charcoal dust per acre, applied at the time of sowing. The wheat now looks fine, better than the years previous; but whatever the result may be, next harvest will tell.

It may be proper to state, that in my first experiment, owing to the previous season being wet, about one third of the seed sown did not come up; and in the second experiment, at the time of seeding, the ground was somewhat like a mortar bed, and a considerable quantity of the wheat plants were winter-killed. The quantity of seed sowed in each case was two bushels per acre.

My fourth experiment was with potatoes, by spreading a handful of guano, mixed with plaster, to every one or two yards along the furrows after the tubers were dropped. The product was middling, size of the potatoes good, quality first rate, and no rotten ones.

I have also tried guano to Indian corn by applying it in the hill; but owing to the dryness of the season, I have not reaped that advantage I anticipated. In one instance, I sowed a small square broadcast, ploughing in the seed, which resulted in from one third to one half more corn than when the guano was applied in the hill. The quantity of guano used was from three hundred to five hundred pounds per acre.

I have also applied guano to my young fruit trees, as well as to almost every vegetable and flower on my grounds, with marked success.

JACOB HEWES.

LEIPERVILLE, PA., *January*, 1849.
— *American Agriculturist.*

The Plum-Tree.

Curculio in different Stages.

THE CURCULIO.

1. Curculio in the perfect or beetle state.
2. Its assumed form when disturbed, or shaken from the tree.
3. Larva, or worm, as found in the fallen fruit.
4. Pupa, or chrysalis form, in which it lives in the ground.

The curculio (*Rhynchænus nenuphar*) is one of the most insidious and destructive insects that the cultivator of fruits has to encounter. It attacks the plums soon after the fruit sets, puts its crescent mark upon it, in which it deposits its egg, which soon hatches, and the worm destroys the fruit. A great deal may be said of this insect, and of remedies against it; but our object at present is to introduce the remarks of Dr. Eastburn Sanborn, of Andover, which were made at the close of the discussion at the agricultural meeting, April 3.

Dr. S. said, that he had made various experiments in order to learn the habits of this insect, and to find a remedy, if possible. He collected many insects, and placed them in glass jars, some of four quarts capacity. To these jars a balloon or globe was attached, composed of gauze over a wire frame; the ends of the wire were fastened into a cork, fitted to the jar, through which a large hole was made, affording the insects the advantage of air, light, and exercise by flying in the balloon. The jars were half filled with earth, and plums, pears, and apples, stung by the curculio, were deposited in them.

In due time, they hatched, and went through the several stages, and the doctor examined their habits very closely both night and day. When the maggot left the fruit, it crawled into the earth, on the outside next to the jar, affording an excellent opportunity for observation. It descended to the bottom, where it remained, as near as he could recollect, about six weeks, when it was changed into the pupa state.

As the earth became dry in August, water was poured into the jar to moisten it, and the insect was soon changed into the perfect state; and they ascended, filling the balloon and flying about in every direction. He showed them to his friends, and found that but very few people could recognize these insects. He had also placed infected apples in the jar, but the apple worm did not go into the earth.

The doctor recommended jarring the trees, in order to free them from this insect, which he found to be very subtle. When approached, it rolls itself up, (see figure 2, in the cut,) assuming the appearance of the bud of whatever tree it is on; and if an attempt is made to take hold of it, it suddenly rolls to the ground, where it cannot be found. After all danger is passed, it flies again to the tree. He had placed a board under a plum-tree, and scarcely any plums were stung over the board, as instinct had taught this insect not to lay its eggs where its young could not burrow in the earth beneath. A smooth, hard surface, under the tree, was a protection against the ravages of this insect. Dr. S. made these remarks with a view of showing, in some measure, the habits of the curculio, and leading to further investigation.

PREPARATION AND PLANTING OF APPLE SEED.

"How should apple seeds be prepared for planting, and what is the proper time and manner of planting?" As to the preparation of seeds, see p. 33 of this volume. Sow apple seeds as soon as the land is dry enough to work. Sometimes they sprout so early that it is necessary to select rather dry land, and plant very soon after the frost is out of the ground. We put our seeds of fruit trees into an ice box, as soon as the weather becomes warm, in spring, to prevent their sprouting till the land is dry enough to work, or we can conveniently attend to it, as we have much to do at this busy season; and we prefer planting some kinds on moist land. Sow apple seeds in drills, and cover as corn or other seeds. The drills may be from fifteen to thirty or forty inches apart, according to the mode of cultivation.

NEW VARIETY OF FLAX.

It is stated in the Ohio Cultivator, that Mr. Samuel Myers, near New Lisbon, cultivates a new variety of flax, which yields an unusual quantity of seed, and is valuable when flax is cultivated exclusively for seed, and it is said to be superior for oil. The stalk is short, and the lint is of but little value.

To keep Birds from Fruits. — Suspend, in the trees or vines, pieces of looking-glass by a string, so as to turn freely in every direction. No bird will come near, after a first trial or so, unless very tame.

AGRICULTURAL PAPERS.

The following extract from the report of Mr. J. G. Chadsey, of Wickford, R. I., to the standing committee of the Society for the Encouragement of Domestic Industry, shows the opinion of a successful applicant for a premium on vegetable crops, whom the committee highly commend for his intelligence and correct views.

I will mention one other mistake that many farmers have fallen into, and some still adhere to it; and that is, an unwillingness to inform themselves in the duties of their calling by reading agricultural publications. New improvements are constantly taking place, and an abundance of light, on the subject of agriculture, is flowing from the press in every direction, and at so cheap a rate that every farmer who can read may enjoy its benefits. A man who cultivates two acres of land, will in the course of a year derive more benefit from an agricultural paper than will pay the cost. This I know from experience. Previous to commencing farming, at the age of threescore, I took an agricultural paper, to aid me in the cultivation of some worn-out land, that I could not rent for four per cent. From that little sheet I gleaned much valuable information; such as the method of composting manure, and the kind best adapted to a particular soil; the advantage of a rotation of crops; directions for selecting the best variety of seeds, with the method of cultivating each kind; and also, frequently cautioned not to improve more land than could be well manured and cultivated to advantage; together with many other suggestions and recommendations, drawn from the experience of practical cultivators. But still there is much published that is of no benefit to a common farmer; but by rejecting that, and treasuring the good, he will find much to aid him in his business. Had I been deprived of that source of information, derived from agricultural publications, during the few years that I have been engaged in my new calling, and have had no other guide to direct me but the example of my neighbors, there is no doubt that I should now be more than a thousand dollars worse off than I am at present; and all for the sake of saving a dollar or two a year.

MODEL FARM OF NEW JERSEY.

As the farm of Professor Mapes is regarded as a pattern, the following account of it, which he has given in the Newark Daily Advertiser, will be read with interest and profit. It shows the advantage of producing a large amount of manure, which may be accomplished by almost every farmer, and mostly with the resources of his own farm.

I would state that my success may be mainly attributed to the use of the subsoil plough and a proper system of manuring.

The land is a clayey loam, underlaid by clay ten inches thick, on a substratum of decomposed sandstone, and, until the clay was cut through by the subsoil plough, the surface was too wet to be productive.

It may not be uninteresting to your correspondent to know the different methods adopted for the manufacture of this manure. The chloride of lime and carbonate of soda is made by slaking three bushels of shell lime, hot from the kiln, with one bushel of common salt dissolved in water. Common salt being composed of chlorine and soda, the lime combines with the chlorine, forming chloride of lime, which, in turn, receives carbonic acid from the atmosphere, and becomes carbonate of soda. This mass should be turned over every other day for ten days, at the end of which time it is ready for use. Four bushels of this mixture, thoroughly diffused through one cord of muck, will decompose it perfectly in ninety days in winter, and in a proportionately less time in summer.

When this muck cannot readily be procured, any other organic matter will answer the same purpose: pond scrapings, river mud, decayed leaves, or even head lands, with one twentieth its bulk of stable manure, or weeds, will answer well.

My stables are arranged thus: Under the oxen, cows, &c., the earth is removed to the depth of eighteen inches, making a space capable of holding a half cord of muck for each animal. This muck is covered at night with salt hay for bedding, and the liquid manure voided by the cattle is absorbed by the muck, and rapidly decomposes it. This decomposition is assisted by the warmth of the animal while sleeping upon the bedding. The solid manure is removed from the bedding each morning, and, after being mixed with twenty times its bulk of muck, is placed under cover. The muck, containing the fluid portions of the manure, is removed every four days, and is also placed under cover: after ten days the manure heap is turned over, and wetted with a weak solution of nitrate of soda, after which it is permitted to remain until sufficiently decomposed for use — thirty days.

All the weeds of the farm are daily thrown into the hog-pen, and the hogs are induced to root among them, to obtain which they keep the weeds in continuous motion until decomposed. About once in ten days, the pen is emptied; and, after salting the weeds to prevent the possibility of their again germinating, they are mixed with twenty times their bulk of muck, and four bushels to the cord of the salt and lime mixture, and placed under cover, where the mass readily heats, and, after twenty days, is ready for use.

These manures, with the occasional use of special manures for special crops, selected with reference to their chemical components as compared with the requirements of the plant desired to be raised, constitute the manures used.

The amount of manure I am enabled to make by the above methods, and the assistance of six oxen, three cows, three horses, and twenty hogs, is about fifty half cords per week.

The subsoil plough is no less important than a sufficiency of manure, and without its assistance no great results can be obtained.

The capacity of soil to perfect vegetables, is precisely in proportion to the quantity of its particles presented to the action of the atmosphere for oxydation; and not one of the most inconsiderable uses of manure is to leave space by its decay for the admission of the atmosphere.

To bring about these conditions, deep ploughing is necessary; and to avoid bringing subsoil of a sterile quality to the surface, while disintegrating to a great depth, the subsoil plough must be used.

My surface plough may be used to turn a furrow of any depth between four and twenty inches, the depth of action being regulated by the guide-wheel. We always use this plough at one inch greater depth than the thickness of surface soil; thus, if the surface soil be fourteen inches deep, the plough is set fifteen inches. One inch of the subsoil is thus brought to the surface at each ploughing, and, by the action of the sun and atmosphere, is gradually converted into loam.

The subsoil plough follows in the bottom of the furrow left by the surface plough, and is usually set at not less than seventeen inches: this plough is so constructed as to throw up nothing, but merely to disintegrate the soil at this great depth, replacing it where taken from without mixing it with surface soil.

The advantages, beyond the admission of atmosphere, are, that in dry weather the roots can pass down below the sun's more immediate action, and obtain moisture; and in wet weather the excess of moisture can pass down through the subsoil cut. If the land is thus kept free from excess of moisture, it can never become cold or sour. After one thorough subsoil ploughing, the land can be worked for much less expense, and is ready for use at an earlier date in the spring.

My seeds being all planted by a drill-harrow, and the rows of plants consequently equidistant from each other, they can be cultivated and weeded by a horse cultivator, instead of using the slow and expensive hand hoe.

Should your correspondent think proper to visit me, I shall be happy to answer any other question he may wish to propose.

Yours respectfully,

JAMES J. MAPES.

FOREST TREES.

This subject is now claiming great attention, and the present generation, ere long, will be as busy in renewing the forest, as were the first settlers in destroying it. Since many parts of the country have become so barren from the destruction of forest trees, it becomes an object to renew them for their shelter and shade, and the beautiful adornment of the landscape; and besides this pleasurable inducement, trees are becoming an important object of profit from their value for timber and fuel. We copy the following judicious remarks from the ninth volume of the Albany Cultivator: —

It must be a subject of astonishment to observe the wonderful intermixture, and seemingly inseparable connection, between moral and physical good and evil; to see that the same thing which we at one time dread with abhorrence, at another time, and perhaps under a little different circumstance, becomes a subject of pleasing admiration. We often hear heart-rending tales of the gloomy and dismal forest; and yet, to a person of good taste, there are no charms, within the compass of nature's works, surpassing those of the forest.

The emigrant to an unsettled country, looks upon the trees as so many savage enemies, which he must conquer and exterminate before he can hope for the enjoyment of peace and tranquillity. When other emigrants settle around him, and they begin to direct their united efforts towards arriving at a state of civilization, they see nothing in their mind's eye but cultivated fields, with meadows and pastures, with all the stumps eradicated, and not a single cluster of trees to interrupt the view. If a single patch is left for wood, it is often sneered at, as it is cheaper to buy wood than to devote the ground to its incumbrance.

But the population increases, perhaps becomes a city. The demand for firewood increases, and timber is wanted in all the various branches of ship and house building, and every patch of forest vanishes before the footsteps of cultivation, like patches of snow before the vernal sunshine, until, as is the case in some countries in Europe, and even in some parts of this country, every piece of timber has to be brought from a great distance, if not imported from a foreign country, and coal dug from the earth for fuel.

In this state of things, sober reflection, which, though a slow, is often a correct teacher, shows us, by costly lessons, what it would have taught before, had it been consulted, — that if, instead of wastefully destroying and exterminating the forest trees, they had been used with prudent economy when necessary, and skilfully managed and preserved when not, they might have contributed largely to pleasure and to profit. The same follies have been extensively committed by other nations; but they have long since discovered their error, and are in many instances setting us examples, in many cases worthy of imitation, in retrieving it. If we profit by their examples, it is still in season to avoid the error in many parts of our extensive dominions; and where it has already been committed, we can, by a judicious course, do much towards making amends in our own days, and avoid entailing on posterity a vast amount of unnecessary trouble and expense. The clearing of a country of forest trees produces, no doubt, atmospheric and meteorological changes more or less connected with health; but we choose to leave that part of the subject to those who are professionally the guardians of health, and to speak of it only as it relates to the common comforts and conveniences of life.

The uses of forest trees, to which we refer, are, shade, for fuel, for timber, and for protection against wind.

There is nothing in the compass of inanimate nature so interesting as trees. They speak a language to the heart of utter insensibility, which it cannot fail to understand. They awaken to recollection the memory of scenes long past, not only in the innocent sports of childhood, but often those of deeper interest. It must be noticed, by every observer, that even the brute creation feel a veneration for trees. A tree is a house, furniture: it may be made clothing, and even bread. "It forms part of every machine by which the genius of man has taught him to lighten the labor of his hand. There is that in a tree, considered as an individual work of the Creator, which may well excite our attention, and most amply reward our study."

For fuel, and more especially for timber, economy alone, without the aid of good taste, would, if consulted, be sufficient to plead for the preservation of forest trees.

But when the folly has been committed, and its consequences are beginning to be sensibly felt, what remedy can be applied, if not to afford immediate relief, at least to prevent posterity from suffering by its effect? The still small voice of common sense, confirmed by the example of several nations of Europe, points out the remedy.

The first step is, to establish nurseries, where all the most valuable trees could be obtained at moderate prices; a few would avail themselves of their advantages, and the force of example would soon excite the multitude to follow them, and in a few years those who lived to see our dwellings, which now stand as unornamental as milestones, tastefully surrounded by beautiful trees, and their value doubled in the eye of most purchasers, they would see the public roads lined with extensive rows of valuable trees, and last, of farm houses, would be sheltered in their situations from bleak and destructive winds by belts of the pine and fir-trees, and their cattle and sheep would find protection in winter, and places of repose from summer heat.

MILK AS AN ARTICLE OF DIET.

It is common to regard milk as little else than mere drink. But this is an error. Milk is really an article of solid food, being coagulated soon after reaching the stomach. New milk contains 13 per cent. of digestible solids, and skimmed milk 10 per cent.; that is, the former fully one half, and the latter above a third, of the nutriment contained in the lean part of beef and mutton. — *Am. Agriculturist.*

Domestic Department.

FRUITS. — Many farmers do not consider the importance of fruits, or, owing to their having much other business on hand, they neglect them. Let the neglect be from what cause it may, the good lady of the house should take hold of the subject and encourage the business, and assist all in her power — and that is a great deal — in having a spot of land well prepared and set with fruit trees. In many cases, ladies take the principal management of the fruit garden, and we never knew a case of the kind that was not successful.

In attending to this subject, it is best to select a few of each species that have, from thorough trial, proved to be excellent. After this is accomplished, it is well to try some of the new kinds of high pretensions; but avoid running into too many experiments, as some of them may be unsuccessful, and discourage beginners.

We need not speak of the advantages of fruit, as a delicious luxury, as a valuable ingredient in food, and often constituting of itself a valuable dish. On health it has an important effect, which alone is sufficient to recommend its general use. With a plenty of good fruit, properly prepared, children want but little meat, or butter, and their food will be far more healthful. Its use may also be recommended on the score of economy.

Every family that has a spot of land sufficient for fruit trees or grape vines, should give attention to their culture, that they may have fruit fresh from the trees, and the pleasure of eating the fruits of their own industry.

FEMALE CULTURE. — The great entertainments of all ages are reading, conversation, and thought. If our existence after middle life is not enriched by these, it becomes meagre and dull indeed. And these will prove sources of pleasure just in proportion to previous intellectual culture. How is that mind to have subject matter of pleasurable thought during its solitary hours, which has no knowledge of the treasures of literature and science, which has made no extensive acquaintance with the distant and the past? And what is conversation between those who know nothing? But, on the other hand, what delight is that mind able to receive and impart, which is able to discuss any topic that comes up, with accuracy, copiousness, eloquence, and beauty! The woman who possesses this power can never fail to render herself agreeable and useful in any circle into which she may be thrown; and when she is so, she cannot fail to be happy. A full mind, a large heart, and an eloquent tongue, are among the most precious of human things. The young forsake their sports and gather around, the old draw nigh to hear, and all involuntarily bow down to the supremacy of mind. These endowments add brilliancy to youth and beauty, and when all other charms are departed, they make old age sacred, venerable, and beloved.

HOW TO MAKE CREAM CHEESE. — For two cream cheeses, take six quarts of new milk and one of sweet cream, to which add two or three spoonfuls of rennet, and let it stand until sufficiently firm; spread a linen cloth in a large basin of cold water, lay the curd gently on it, tie the cloth, and hang it up to drain, for four or five hours, in a cool place; then change the cloth, and put the curd into a vessel the circumference of a common plate, and press it moderately six or eight hours, when it must be taken out, turned, and split horizontally with a thread; lay the cloth between the two cakes, and again put them in press for twelve or fourteen hours: if then pressed enough, which can be ascertained by their firmness, keep them in fresh grass a few days, turning them morning and evening. The price of these, about the fill of a common dining plate, is twenty-five cents.

It is wonderful what a variety of forms and dishes a good housewife will learn to make in the country out of a few simple materials, to tickle the palate of the "lord and master," and leave him without any *honest* excuse to be tired and out of humor with his own home and fireside!

Boys' Department.

Labor *For the New England Farmer.*

INDUSTRY. — Boys should be industrious, busy, and active, ever desiring and aiming at improvement. Happiness and success in life depend upon this; usefulness in the world — an object worth living for — is greatly promoted by an economical appropriation of our time. Spare moments — the golden sands of life — should all be turned to good account. Much is to be learned, and more, if possible, is to be accomplished. Time, even if lengthened beyond our reasonable expectation, is not too long to be appropriated to those virtuous uses which the Great Dispenser of all our blessings requires of our hands.

When not actively engaged in bodily labor, let the mind take its alternate turn at some laudable object or useful purpose; even then, when the muscles are in action, the higher organization of thought and mental application may not remain idle; mind may, and should, predominate over matter; therefore let the faculties of the soul expand and mount upward on the rapid wings of improvement and a legitimate and rational system of enjoyment. J.

POLITENESS. — Be polite at all times, and to all persons. Remember that you will lose nothing by thus doing; you will be more respected, and certainly more beloved, than you will be if you are in the habit of answering in an abrupt or unkind manner. It will also render you *happier* to do this; for if polite yourself, you will generally meet with politeness in return; and if you do not, you will still have the inward consciousness of having yourself acted correctly. — *Well-Spring.*

Health.

REMEDY FOR A COUGH. — Mr. Charles Pierce, of Milton, a farmer, of about fifty-seven years of age, informs us that for several winters past he had been afflicted with a severe cough, which continued notwithstanding various medicines were used. As warm weather came on, in spring, his cough abated.

The past winter, he was troubled, as usual, with a cough; and he resolved to try a new remedy. Accordingly, he commenced clearing up a piece of land,

on which were whortleberry and other small bushes, and in which there were numerous small stones.

The snow was about a foot deep: this he shovelled off, then cut the bushes, and dug the stones, as the ground was not frozen hard. While operating, he turned up the fresh and pure soil, which he often took up; and with his mouth wide open, and close to the soil, he inhaled the scent of the fresh earth, and, persevering in this course till he had cleared half an acre of land, he found himself strong and hale, having got entirely rid of his cough.

A few days ago, he was in our office, looking robust and healthy; and he had walked from Milton, a distance of seven miles, intending to return in the same way, preferring walking to riding.

Here is an important lesson. We have no doubt that the scent of that fresh earth had more remedial power that all the nostrums and doses of the apothecary's shop, simple, or compounded with the greatest scientific skill.

It may be said that the exercise was a help in this case; and it doubtless was an auxiliary, as it was regular and various, affecting all parts of the system, and the chest in particular. But it should be considered that Mr. Pierce is an industrious man, and does not suffer for want of exercise; yet that afforded in clearing land might be more congenial to health than the labor to which he usually attended.

So we credit a part of the remedial means to the better exercise, and we will also credit something to the expansion of the lungs, by long and strong inhalations, which gave them full play, and tended to strengthen them. After deducting these credits, and any others that may be suggested, we think much will be left in favor of the pure earth. We have generally found that labor in the soil is the most invigorating and healthful of all exercises.

Cure for Rheumatism. — We recommend the following recipe, which will be found, upon trial, to be a simple, still an invaluable remedy for rheumatism. Take a pint of the spirits of turpentine, to which add half an ounce of camphor; let it stand till the camphor is dissolved; then rub it on the part affected, and it will never fail of removing the complaint. Flannel should be applied after the part is well fomented with turpentine. Repeat the application morning and evening. It is said to be equally available for burns, scalds, bruises, and sprains, never failing of success. We can vouch for its efficacy in rheumatic affections, as a tried remedy.

Mechanics' Department, Arts, &c.

Platina Metal. — This very little known metal was formerly more valuable than gold. But the platina mines of Russia have furnished such an abundance of the ore, that it is now next to gold in value. It is a metal of whitish, silvery color, the heaviest, the most difficult of fusion, the most ductile, and the most flexible of the known metals, having a specific gravity of 21.5, and capable of being hammered into leaves, or drawn into wires, of extreme tenuity. Its hardness is intermediate between that of copper and iron; and though very infusible, it is malleable, and capable of being welded at a white heat, either one piece to another, or to a bit of iron or steel. It is not in the least affected by the air or water, and it is not attacked by any of the pure acids; but is dissolved by chlorine and nitromuriatic acid.

In beauty, ductility, and indestructibility it is hardly inferior to gold. When a perfectly clean surface of platinum is presented to a mixture of oxygen and hydrogen gas, it has the extraordinary property of causing them to combine, so as to form water, and often with such rapidity as to render the metal red hot. Platinum was discovered about 1741; but it attracted little notice until the mode of purifying it and rendering it malleable was discovered by Dr. Wollaston. It is found in the metallic state in Brazil and Peru; at Antioquia, in South America; Estremadura, in Spain; and latterly, in considerable quantities, in the Uralian Mountain, and in California. Its appearance, in the rough state in which it is imported, is that of small grains or scales, of a metallic lustre, darker than silver, and extremely heavy. In this state it is combined with palladium, rhodium, titanium, iron, gold, or other metals. The particles are seldom larger than a pea, but pieces have been found as large as a hazel-nut; and in 1831, a mass of native metal was discovered in Demicloff's gold mines, in Russia, weighing upwards of twenty pounds.

The perfection with which vessels of platinum resist the action of heat and air, of most of the acids, and of sulphur and mercury, renders them peculiarly valuable in many chemical applications; so that, notwithstanding the high value of the metal, which is between four and five times its weight of silver, it is now much employed for crucibles, retorts for the distillation of sulphuric acid, mirrors for reflecting telescopes, by gunsmiths and others. Its property of being welded, either one piece with another, or with iron and steel, admits of many useful applications in the arts. From its scarcity and indestructibility, it has been proposed to use it for coinage; and we believe coins of the respective values of three, six, and twenty silver roubles are now current in Russia.

Improvements on Windmills. — Mr. Charles B. Hutchinson, of Waterloo, Seneca Co., N. Y., has recently made some valuable improvements on windmills, both for self-regulating and reefing the sails. A common governor is used for the regulating of the angle of the sails to the wind; but this is employed in a most judicious and novel manner for retaining the ends of the booms in slot when necessary, at an angle reverse to the allowing of the sails to present the square of their surfaces to the blast. This mode of self-regulation has been completely successful in practice during the most fitful windy days of this autumn. — *Genesee Farmer.*

THE TEA PLANT IN THE UNITED STATES.

The planters and farmers of the Southern States will be gratified to learn that seven cases of black and green tea plants, Chinese stock, have just arrived from London in the ship American Eagle, shipped by Dr. Junius Smith, during his late visit to that city. There are five hundred plants, of from five to seven years' growth. All are designed by the doctor as seed plants. A small quantity of tea seed was brought out by him in the steam ship Britannia, which was received in London overland from the north-west provinces of India. We understand the doctor designs to proceed soon to the south, with a view of forming a plantation. More plants and seed are expected from India and China this season; and

if we may judge from the progress already made, we have now the means in hand of extending tea plantations throughout such sections of our country as may be found adapted to their cultivation. — *Journal of Commerce.*

EXPORTATION OF COWS.

Maine has long been a stock-growing state, and one of her staple products has been neat stock, thousands and thousands of which are driven away every fall. The heavy oxen are mostly driven east, into the provinces, for beef, and to be used in the lumber business. The lighter cattle and stores are driven to Brighton and there sold. Recently we met with a gentleman from Springfield, Mass., who was in pursuit of first-rate cows. He understood the properties of a good cow, and could *read* one with great accuracy. He started last week with a small drove, which he had collected in the towns of Winslow, Waterville, Belgrade, &c. They were prime animals, and will report themselves favorably to the farmers of the Old Bay State. Here, then, is opened a new branch of the stock trade, viz., the rearing of first-rate milkers for sale, to supply the milk farms of other states.

In order to follow this successfully, it will be necessary to pay more attention to the milking properties of the breeders, and to breed from those that have proved themselves good milkers. The principles of breeding cows for great milking qualities are not so well understood as those for breeding for beef. The qualities and points which make an animal excellent for the latter are more tangible, depending on the peculiar conformation and arrangement and shape of different organs. This is not wholly the case with an animal for milking qualities. True, the form and position of certain organs are indicative of these properties; but there are also certain physiological principles involved in the formation of large quantities of rich milk, that are not always manifest to the casual observer. — *Maine Farmer.*

CLIPPING HORSES.

Clipping undoubtedly enables a horse to perform his work with greater ease, in the same way that a man can work easier in his shirt sleeves than in a great coat; besides this, he can be dressed quicker and more readily. Extra clothing is required, and the horse should not stand about in cold weather. Where, however, he is obliged to do so, singeing is better than clipping, as it does not remove so much of the coat, but can be repeated during the winter. — *Ag. Gazette.*

CURE FOR SCRATCHES ON HORSES.

Feed a horse one or two tablespoonfuls of sulphur per day, (in order to cleanse his blood,) for three or four days, wash the feet in clean, soft water, then put on dry sulphur, and wind a linen cloth around the sore, and twice or three times a day drop in dry sulphur between the cloth and the sore. Be careful to keep the feet dry, as it is of no use to doctor the feet until the blood is put in order. This seldom fails in the worst cases.

SEASONS FOR FELLING RESINOUS TIMBER.

In cutting timber, of all kinds, advantage should be taken of the season which will favor their duration and strength. Thus oak and most other kinds of non-resiniferous trees, as far as the knowledge of practice extends, are stronger and more durable when felled in early winter, at the time the pores contain but little sap. On the contrary, the timber of pine, larch, and other resinous trees, cut in spring or early summer, when the pores are filled with resin, which is, in fact, a sort of embalming, possesses a greater degree of strength, and will endure longer, than if cut when the resin is absent from the wood, which is more or less the case in autumn or winter.

We have no hesitation in stating, that good heart pine, cut in spring, or early summer, when full of resin, is fully equal in lasting qualities to any hardwood timber that can be produced, quite putting in the shade the processes of Payne, Kian, and Burnett, from the efforts of nature being more freely carried out than can possibly be done by the very best exhausting engine and hydraulic presses that have yet been made. — *American Agriculturist.*

TEXAS WHEAT.

It is stated by a gentleman from Corsicana, in Limestone county, that about forty thousand bushels of wheat have been raised in Navarro and Limestone counties this season. A part of this was harvested as early as the 9th of May, and it is of an excellent quality. The grains are plump and large, and the wheat, it is believed, will average over sixty pounds to the bushel. A large quantity of wheat has been raised in Trinity Valley, above Dallis. The experiments in the culture of this grain indicate that the whole region, watered by the Trinity and its tributaries above Smithfield, is as well adapted to the culture of wheat as the best wheat-growing regions in the Middle States. The soil, in this section, contains a large proportion of lime; and it is probably owing to the presence of this mineral that it is better adapted to the culture of wheat than the soil near coasts. There is a belt of country extending quite across Texas, from the Red River to the Rio Grande, and including most of the undulating region of that country, that is as well adapted to the culture of wheat as any portion of the Union. This section comprises at least thirty millions of acres, and may, at some future day, yield bread stuffs sufficient for the consumption of more than ten millions of people. — *Lancaster (Pa.) Farmer.*

IMPROVEMENT OF VARIETIES.

A writer in the Gardener's Chronicle gives some interesting results of experiments in improving the varieties of vegetables. He began with long pod beans. He took for seed none with fewer than five seeds in a pod. The following year there were many six-seeded pods, and some with seven. Still selecting the best, he procured many six and seven-seeded pods, and some with eight. In this way new and distinct varieties were formed; for while some remained with five-seeded pods, it was found that they rarely had a six-seeded pod upon them; while those with six-seeded pods were nearly all so, and some seven-seeded. New varieties are only produced from seed; hence the importance of a constant care in selection in all crops which are annually reproduced in this way. A skilful market gardener, in Western New York, by constantly selecting the earliest seeds of the Washington pea, in a few years had them more than a week earlier than his neighbors, who cultivated the same variety. Plants not reproduced by seeds, as the potato by eyes or tubers, and fruit trees by grafts and buds, remain perfectly unchanged for ages; for this is only a continuation of the same original plant, which cannot change its own being. — *Albany Cultivator.*

OSAGE ORANGE.

Agreeably to request, we lately published an article on the use of this plant for hedges, and we inquired as to its hardiness; since that time, we have heard from several places where it has been cultivated in New England, and it is found too tender for the cold of this climate. It has also been killed by the winter on Long Island, N. Y. Mr. Downing, in his Horticulturist, gives an opinion that it will endure the cold as far north as the Isabella grape will ripen; but we think, from the few experiments that have been made, that the Osage orange will not bear extension so far north as the Isabella, for this is the principal grape cultivated in this region.

HOW TO ENLARGE VEGETABLES.

A vast increase of food may be obtained by managing judiciously and systematically carrying out for a time the principles of increase. Take, for instance, a pea. Plant it in very rich ground; allow it to bear the first year, say half a dozen pods only; remove all others, save the largest, the following year, and retain of the produce three pods only; sow the largest the following year, and retain one pod; again select the largest, and the next year the sort will by this time have trebled its size and weight. Ever afterwards sow the largest seed, and by these means you will get peas, or any thing else, of a bulk of which we at present have no conception.

CULTIVATION OF THE RASPBERRY.

The plants are frequently set out in light and poor soils, crowded together, left untrimmed, choked up with a profuse growth of weak stems; and what little fruit they produce is nearly dried up, from the arid situation in which they were placed. On the contrary, in cool, deep, and moist soils, in a sheltered and partially shaded place, the plants throw up suckers to the height of six or eight feet, and produce a profusion of large, handsome, and well flavored berries. So well assured are the most eminent English cultivators of the raspberry, of its love of a cool and moist soil, that some writers have strenuously recommended the use of bog earth and rotten leaves, in the place of richest loam. We are well assured that the many complaints which are made of the meagre produce of many raspberry plantations, may be attributed wholly to the light and droughty soils in which they are often planted.

A cool aspect is of material consequence; and to secure this, the north side of a fence or trellis, which will form a screen from the sun, is the most favorable; on the north side of the shrubbery or row of fruit trees, is also a suitable place. If neither of these situations is to be had, an open spot in the garden may be chosen, always being careful to avoid the south or east side of the fence. A temporary shade may be effected in the open garden by planting a row of running beans on the south side. — *Hovey's Magazine of Horticulture.*

A HINT TO OWNERS OF HOTHOUSES.

"Give me air, or I shall die!" is an exclamation which most people have heard occasionally, but which a gardener might listen to every hour of his existence, had he skill to interpret the language of plants. "Give me air, or I shall die!" is incessantly repeated by every leaf in ninety-nine hothouses, greenhouses, conservatories, hibernatories, and pits, in a hundred, all over the world. But the voice is unheard; the pale looks, the feeble frames of the sufferers are disregarded; heat is offered as a substitute for air, and the duties of horticulture are thought to be fulfilled when a blanket is wrapped round a patient perishing with suffocation.

PREPARATION OF CLOVER SEED.

We have received two communications from Joseph Warbasse, of Newton, New Jersey, on his mode of preparing clover seed for sowing, by which the writer calculates he makes a saving of one half the seed required. Mr. Warbasse's process seems to be predicated on the assumed fact, that ordinarily more than one half of the seed does not germinate, either from the want of moisture to swell it, or of gypsum, the presence of which he considers essential to stimulate the germinating principle. Mr. Warbasse is probably right in saying that one half the clover seed sown does not come up; he is strengthened in his supposition that much of it remains dormant in the soil, by the fact he states, and which is of common notoriety, — that plaster sown on light lands will bring in clover, where no seed is sown at the time. Mr. Warbasse's remedy for the evil is, to saturate and swell the seed thoroughly in soft water, to which a small quantity of salt is added, and after it becomes well saturated, to coat it with gypsum, &c., the effects of which seem to be to prevent the escape of moisture which the seed has imbibed, and thus insure its germination and growth. A further advantage may be, that the salt imparts fertility to the soil which comes in immediate contact with the seeds, and causes a more vigorous growth. Such seems to be the philosophy upon which Mr. W.'s practice is founded. We give the process of preparing the seed in his own words.

"The seed is to be made thoroughly wet with a strong pickle from your pork cask; let it remain in a heap one day; then spread it about one or two inches thick on a dry floor, and in a few days a crust of salt will be formed on each grain. When you wish to sow it, moisten it again with pickle, spread it over a floor, and put on about three quarts or more of gypsum to a bushel of seed; mix it well, and keep it moist in a cellar until you sow it." — *Yankee Farmer.*

NEW INVENTION.

An acquaintance of ours in this city, who is quite a bee-fancier, and has closely observed and studied their habits for several years, placed a new swarm in a hive of his own construction on the 25th of June last. This hive is made to conform to the natural habits of the insect in its wild state; is of the usual form, but closed at the bottom with a close-fitting lid covered with wire cloth, about eight meshes to the inch. This allows all the dirt and chips of comb made by the bees to sift through, and admit sufficient air for ventilation. It is hung on butts, and can be opened to brush off any dead bees, or any other substance too large to fall through it. Near the top, directly over the drawers, is an inch auger hole, for the passage of the "workers." This aperture, being at the top of the swarms, has always a cluster of busy bees about it, so that no miller can enter; and as there is no other mode of ingress, our friend thinks that the hives may be kept from worms, which are the great enemy of the apiary. Nothing larger than an ant can go through the wire bottom, and they are easily kept away by salt. The swarm in the hive is the most busy its owner ever witnessed;

and as evidence of this, he finds the hives on the tenth day two thirds full of comb — nearly double what is usual for so late a swarm.

RASPBERRIES.

S. A. Barrett, of Milton, N. Y., asserts that "a strong deep loam, with but little sand, is the only soil from which a full crop is to be expected every season from the Red Antwerp." He also states that N. Hallock, of that place, produced a crop the past season, from three fourths of an acre, which sold for $330 in New York city.

FACTS IN PHYSIOLOGY.

A man is taller in the morning than at night to the extent of half an inch, owing to the relaxation of the cartilages. The human brain is the 28th of the body; but in a horse, only the 400th. Ten days per annum is the average sickness of human life. About the age of 30, the lean man generally becomes fatter, and the fat man leaner. Richter enumerates 600 distinct species of disease in the eye. The pulse of children is 180 in a minute; at puberty, it is 80; and at 60, it is only 60. Dr. Lettom ascribed health and wealth to water, happiness to small beer, and all diseases and crimes to the use of spirits. Elephants live to 200, 300, and even 400 years. Bats, in India are called *flying foxes*, and measure six feet from tip to tip of their wings. Sheep, in wild pastures, practise self-defence by an array, in which rams stand foremost, in concert with ewes and lambs, in the centre of a hollow square. Three Hudson's Bay dogs draw a sledge loaded with 300 pounds fifteen miles in a day. One pair of pigs will increase in six years 119,160, taking the increase at fourteen times per annum. A pair of sheep in the same time would be but 64. A single house fly produces in one season 20,080,326 eggs. The flea, grasshopper, and locust jump 200 times their own length, equal to a quarter of a mile for a man.

THE PURITY OF DIFFERENT KINDS OF SALT.

Prof. Beck, of Rutgers' College, has made the following analysis of the different kinds of salt: —

1000 parts Onondaga coarse salt contain pure salt 991 parts.

1000 parts Onondaga dairy salt contain pure salt 974 parts.

1000 parts Turk's Island salt contains pure salt 984 parts.

1000 parts Cheshire crushed rock salt contain pure salt 986 parts.

If this be true, why is it that farmers and beef and pork packers still *prefer* Turk's Island, or Liverpool, Cheshire, salt? This fact is notorious. If Onondaga salt was better, would they not find it out! — *Buff. Com.*

We concur in, and repeat the inquiry above. If Onondaga salt is better than Turk's Island or Liverpool, why is it, that our farmers and beef and pork packers do not find it out? There must be some mistake in this matter. Perhaps it is in the frauds practised in its manufacture or packing. If so, how can pure Onondaga salt be secured? We should like to know. — *Rochester American.*

"Swear not at all." Deceive not. Profanity and falsehood are marks of low breeding. Show us the man who commands the best respect — an oath never trembles on his tongue — a falsehood is never breathed from his lips.

THE FARMER'S DAUGHTER.

She may not, in the mazy dance,
With jewelled maidens vie;
She may not smile on courtly swain
With soft, bewitching eye;
She cannot boast a form and mien
That lavish wealth has brought her;
But, ah, she has much fairer charms, —
The farmer's peerless daughter!

The rose and lily on her cheek
Together love to dwell;
Her laughing blue eyes wreath around
The heart a witching spell;
Her smile is bright as morning's glow
Upon the dewy plain,
And listening to her voice we dream
That spring has come again.

The timid fawn is not more wild,
Nor yet more gay and free;
The lily's cup is not more pure
In all its purity; —
Of all the wild flowers in the wood,
Or by the crystal water,
There's none more pure or fair than she, —
The farmer's peerless daughter!

The haughty belle, whom all adore,
On downy pillow lies;
While forth upon the dewy lawn
The merry maiden hies;
And, with the lark's uprising song,
Her own clear voice is heard:
Ye may not tell which sweetest sings,
The maiden or the bird.

Then tell me not of jewelled fair —
The brightest jewel yet
Is the heart where virtue dwells
And innocence is set;
The glow of health upon her cheek,
The grace no rule hath taught her:
The fairest wreath that beauty twines
Is for the farmer's daughter!

THE OLIO.

If we would enjoy ourselves, we must take the world as it is — mix up a thousand spots of sunshine — a cloud here and there — a bright sky — a storm to-day, calm to-morrow — the chill, piercing winds of autumn, and the bland, reviving air of summer.

Longitude. — "Tommy, my son, what is longitude?" "A clothes line, daddy." "Prove it, my son." "Because it stretches from pole to pole."

Why is a lady, while decorating her fingers, like one in distress? Because she's *wringing* her hands.

Sophistry is like a window curtain — pleases as an ornament, but its true use is to keep out the light.

TERMS. — The New England Farmer is published every other Saturday, making a neat and handsome volume, at the close of the year, of 416 pages, at $1 a year, or five copies for $4, payable in advance. It may be neatly bound at 18¾ cents, or elegantly bound in muslin, embossed and gilt, at 25 cents a volume. As it is stereotyped, back numbers can be furnished to new subscribers.

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